What is claimed is:

1.   An apparatus for monitoring and exploring data on a
network and notifying one or more users of the results,
the apparatus comprising a server coupled to one or more
client stations and to the network, the client stations
each for use by the one or more users,

the server comprising,

   a.   a computer processing device,

   b.   a storage device,

   c. -   a memory device,

   d.   an agent creation/modification element for
         creating/modifying a computer program
         which visits and sends data back from the
         network according to instructions
         specified by one or more of the one or
         more users, and

   e.   a database allocation and search element
         for searching data according to
         instructions specified by one or more of

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the one or more users.

2.   The apparatus of claim 1 wherein the server also comprises a rule interpretation element.

3.   The apparatus of claim 1 wherein the data searched by the database allocation and search element is located on the network.

4.   The apparatus of claim 1 wherein the data searched by the database allocation and search element is located on the monitoring site.

5.   The apparatus of claim 1 wherein the monitoring site maintains one or more account files for each of the one or more client stations.

6.   The apparatus of claim 1 wherein the instructions specified by one or more of the one or more users are in the form of monitor/probing rules.

7.   The apparatus of claim 1 wherein the network is the Internet.

8.   The apparatus of claim 2 wherein the rule interpretation element includes SQL interpretation means.

9.   The apparatus of claim 1 wherein the database allocation and search element includes SQL query means.

10.   A computer-based method for monitoring and exploring data in a network and notifying the user of search results, the search performed according to the user's instructions, the method comprising the steps of:

    a.   specifying a monitor/probing rule;

    b.   converting the monitor/probing rule into instructions capable of being executed by a computer processing device;

    c.   allocating space on a storage device;

    d.   creating/modifying an Agent program;

    e.   the Agent program visiting a monitored site periodically and evaluating and retrieving information according to the user's instructions;

    f.   determining whether retrieved information satisfies user-specified conditions; and

    g.   in the event said user-specified conditions are satisfied, performing one or more exploration

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actions and returning the results to the user.

11. The computer-based method according to claim 10 wherein the step of converting the monitor/probing rule into instructions capable of being executed by the computer processing device is performed at a monitoring site.

12. The computer-based method according to claim 10 wherein the step of converting the monitor/probing rule into instructions capable of being executed by the computer processing device is performed at a client station.

13. The computer based method of Claim 10 wherein the network site is a Web site.

14. The computer based method of Claim 10 wherein the results returned to the user are returned via e-mail.

15. The computer based method of Claim 10 wherein the step of performing a exploration action is performed on a site on the network.

16. The computer based method of Claim 10 wherein the step of performing a exploration action is performed on

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the monitoring site.

17.   The computer based method of Claim 10 wherein the step of performing a exploration action is performed at a client station.

18.   The computer based method of Claim 10 wherein the step of allocating space also includes allocating space for a database.

19.   The computer based method of Claim 18 wherein the database is a relational database.

20.   The computer based method of Claim 18 wherein the database is constructed using an object-oriented model.

21.   The computer based method of Claim 18 wherein the database maintains temporal information.

22.   The computer based method of Claim 18 wherein the retrieved information includes a copy of one of one or more monitored predicates.

23.   The computer based method of Claim 10 wherein the retrieved information is less than a copy of one of one or more monitored predicates.

24. The computer based method of Claim 10 wherein the monitor/probing rule comprises one or more clauses.

25. The computer based method of Claim 24 wherein the one or more clauses comprise a IF clause and a THEN clause.

26. The computer based method of Claim 25 wherein the one or more clauses also comprise WHEN clause.

27. The computer based method of Claim 24 wherein the one or more clauses comprise a WHEN clause and a THEN clause.

28. The computer based method of Claim 24 wherein an IF clause contains one or more atomic conditions.

29. The computer based method of Claim 28 wherein the one or more atomic conditions also comprise one or more literals.

30. The computer based method of Claim 28 wherein the one or more atomic conditions also comprise one or more binary past temporal operators.

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31.   The computer based method of Claim 28 wherein the one or more atomic conditions also comprise one or more unary past temporal operators.

32.   The computer based method of Claim 24 wherein a THEN clause comprise one or more probing actions.

33.   The computer based method of Claim 32 wherein the one or more probing actions also comprise one or more SQL searches.

34.   The computer based method of Claim 32 wherein the one or more probing actions also comprise the execution of a program written in an all purpose programming language.

35.   The computer based method of Claim 32 wherein the one or more probing actions also comprise one or more Data Mining Queries.

36.   The computer based method of Claim 24 wherein a WHEN clause comprises expressions consisting of one or more events.

37.   The computer based method of Claim 36 wherein the one or more events are changes at a Web site on the

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Internet.

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Add A', B'

add
CS D

10

add
E